REMARKS

The Office Action of March 9, 2009, has been carefully studied. Claims 16-19 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Telephone Interviews

Applicant's attorney wishes to thank Examiner Piziali for the courtesies extended during the telephone interview of May 20 and June 2, 2009. During those interviews, amendments to the claims were discussed. Applicant suggested reciting the temperature at which the oxidized polypropylene was carbonized, as the specification clearly demonstrates by way of examples that the carbonization temperature is critical in producing a fabric that has effective electromagnetic shielding properties. Additionally, the fabric was defined as an "electromagnetic shielding" fabric, again to differentiate the claimed fabric from those in the cited art, which merely disclosed fabric for heat shielding or fireproofing. During the June 2 interview, it was agreed that "electromagnetic" could be substituted for "magnetic", as the units of measurement recited in the claims are for electromagnetic shielding. Therefore, this is not new matter.

Art Rejections

Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough, US 4,950,533 in view of Ram, US 3,914,393 in view of Barron, US 4,248,036.

This rejection is respectfully traversed. The claims have been amended to recite that the fabric is an electromagnetic wave shielding fabric. Support for this can be found in the specification as filed at page 2, lines 11-13, page 4, Table 1, and Tables II and II on pages 5 and 6. It is clear from the description that the fabrics produced by the claimed method are fabrics for electromagnetic wave shielding, and that the carbonization temperature directly affects the shielding effect of the fabric so formed. Likewise, the warp and weft density directly affect the electrical resistivity of the fabrics. Table III shows the relationship between the carbonization temperature of the fibers and the electromagnetic wave shielding efficiency of carbon fabrics produced by different carbonization temperatures.

Table II clearly shows that the carbonization temperature directly affects the sheet resistance of the fabrics. Fabrics carbonized at temperatures below 900°C exhibited substantially no sheet resistance.

Table III shows that the comparative examples, which were carbonized at temperatures below 900°C, exhibited much less electromagnetic wave shielding efficiency than did the fabrics made from fibers carbonized at about 900°C. It is clear that the carbonization temperature affects the electromagnetic wave shielding efficiency of the fabrics. Thus, it is respectfully submitted that none of the cited

references even suggest producing carbon fabrics that are electromagnetic wave shields.

The preamble of the claims, that the claims are drawn to an electromagnetic wave shielding carbon fabric, makes it clear that the claimed fabric is different from the heat shielding fabrics of the cited art. The preamble of the present claims must be given weight Attention is directed to *In re Steppan et al.*, 228 156 USPQ 143, 147 (CCPA 1967); *In re Bulloch et al.*, 203 USPQ 171, 174 (CCPA 1970); *corning v. Sumitomo*, 9 USPQ2d 1962, 1965-1966 (Fed. Cir. 1989). In *Loctite v. Ultraseal*, 228 USPQ 90, 91-93, the introductory portion of claim 1 of the '012 patent read as follows:

1. An anaerobic curing sealant composition adapted to remain in a liquid, non- polymerizing state... .

The court stated:

> Although it appears in the preambles of the '012 patent claims, the term "anaerobic" breathes life and meaning into the claims and hence is a necessary limitation to them. [citation omitted]

The holdings of the lower court were vacated, and the case was remanded.

Attention is next invited to *In re Stencel*, 4 USPQ2d 1071 (Fed. Cir. 1987) where the introductory clause of claim 1 called in part for a "driver for setting a joint of a threaded collar, ... the collar having plastically deformable lobes on its longitudinal exterior ..., the driver comprising: ...". In reversing the rejection, the Court stated:

> We conclude that it would not have been obvious to [provide the applicant's invention] unless one had in mind the purpose taught by appellant. This purpose, set forth in the claims themselves, "is more than a mere statement of purpose; and that language is essential to particularly point out the invention defined by the claims." [citations omitted; bracketed material added]

Similarly, in the present case, the purpose of the present applicant is not to be found in the applied prior art; this purpose, set forth in applicant's claims, "is essential to particularly point out the invention defined by the claims".

Barron only describes filaments, not carbonized filaments. It is not understood how Barron has anything to do with the herein claimed fabric when the density is not that of a carbonized filament or fabric.

Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough in view of Oogawa, US 4,861,809, in view of Barron.

This rejection is respectfully traversed. The fact that the fibers disclosed by Oogawa have low heat conductivity is immaterial, as the presently claimed fabrics are electromagnetic wave shielding fabrics. As demonstrated in the specification as filed and as discussed above, the process for making the electromagnetic wave shielding fabrics claimed herein is critical to their electromagnetic wave ding ability. It is respectfully submitted that applicant has done more than substitute known equivalent structures, as there is nothing in any of the cited patents that even suggests that the fabrics or fibers disclosed therein have electromagnetic wave shielding ability.

It is respectfully submitted that the applied prior art is not substantially identical to the electromagnetic wave shielding fabric claimed herein. McCullough discloses that the carbon fibers have an electric resistivity of have a nitrogen content of about 5 to 35 % (column 5, lines 47-49) and the fibers are carbonized at about 525°C, a much lower temp, far lower than the temperature required to produce fibers have effective electromagnetic wave shielding ability.

Oogawa discloses a friction material containing about 0.2-29% by weight carbonaceous fibers with a bond nitrogen content of from about 14 to 21 wt%. According to Oogawa, if the amount of carbon fibers is greater than about 50 wt %, the friction coefficient of the fabric cannot be adjusted to the desired level. The fibers claimed herein have a carbon content of **at least 50%**, so it is clear that Oogawa teaches away from the fabrics disclosed herein.

Barron only describes filaments, not carbonized filaments. It is not understood how Barron has anything to do with the herein claimed fabric when the density is not that of a carbonized filament or fabric.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By _____
Anne M. Kornbau
Registration No. 25,884

AMK:srd
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
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